

Amendments to Claims

1. (Original) A fuel cell assembly having a plurality of fuel cell component elements extending under compressive pressure between a pair of endplates to form a cell stack assembly, and having a reactant gas manifold, said elements having mutually uneven surfaces at ends thereof to which said manifold is to be sealed, and having a first seal part comprising at least one type of elastomer applied to said mutually uneven surfaces;

characterized by the improvement comprising:

a groove disposed within a contact surface of said manifold for receiving an elastomer gasket;

a notch extending from a surface of each of said endplates for receiving an end portion of a rigid strip coplanar with said endplate surface to form a sealing surface of said stack assembly coextensive with and facing said manifold contact surface;

a second seal part comprising an elastomer gasket disposed within said groove of said manifold; and

a third seal part comprising a rigid dielectric strip interposed between said first seal part and said second seal part.

2. (Original) An assembly according to claim 1 wherein said rigid strip is an angled corner strip.

3. (Original) An assembly according to claim 1 wherein said rigid strip is flat.

4. (Original) An assembly according to claim 1 wherein said rigid strip comprises a fiberglass reinforced plastic.

5. (Original) An assembly according to claim 1 wherein said rigid strip comprises a polymer-coated metal.

6-9. (Cancelled)

10. (Currently Amended) A method of sealing a contact surface of a reactant gas manifold to endplates and fuel cell component elements of a fuel cell stack assembly comprising:

- (a) forming a groove in the contact surface of said manifold;
- 5 (b) providing an elastomer gasket disposed within said groove;
- (c) providing a notch in a surface of said end plate for receiving a rigid dielectric strip coplanar with said endplate surfaces to form a sealing surface of said stack assembly;
- (d) applying at least one layer of an elastomer to the regions of said fuel
- 10 cell elements that are to be sealed to said manifold to provide a surface which is relatively smooth and flat;
- (e) adhering a rigid dielectric strip to said elastomer layer; and
- (f) installing said manifold on said fuel cell stack assembly such that its entire contact surface is in direct contact with said sealing surface of said stack
- 15 assembly, said rigid strip being between said manifold and said ~~silicone-rubber~~ elastomer layer.